REMARKS

This is in response to the Office Action mailed on February 15, 2011. The due date for response is extended to March 16, 2011 because March 15, 2011 falls on a Sunday.

With this Amendment, claims 1-10 are amended. All amendments are fully supported by the original specification and drawings. No new matter is added. Claims 1-10 are pending in this application, with claims 2 and 4 being withdrawn from consideration. In light of the foregoing amendments and following remarks, Applicants respectfully request advancement of this application to allowance.

Claim Objections

Claims 1, 3, and 5-10 are objected to for informalities. Applicants thank the Examiner for the careful review of the claims. Claims 1, 3, and 5-10 are amended herein as discussed below. Reconsideration and withdrawal of the objections are requested.

Claim 1

	Claim Objections	**Amendments**
-	Applicant should delete "a detecting" after "detecting."	Claim 1 is amended to delete "a detecting" after the word "detecting," as suggested by the Examiner.

Claims 3, 5-10

	Claim Objections	**Amendments / Remarks**
-	Claims 3 and 5-10 are objected to under 37 CFR 1.75(c) as being of improper dependent form. The numeration of the steps should be different from in claim 1.	Claim 3 does not depend from claim 1. Therefore, Applicants respectfully traverse the objection. The numeration is proper as is. Claims 5-8 are amended to begin with "g)" because the claims depend from claim 1, and claim 1 concludes with "f)." Claim 9 is amended to begin with "p)" because claim 9 depends from claim 5, which concludes with "o)." Claim 10 is amended to begin with "q)" because claim 10 depends from claim 8, which concludes with "p)."

Claim 3

	Claim Objections	**Amendments / Remarks**

A	Perhaps applicant should insert a step of "measuring the transmission temperature with the oil temperature sensor" as the very first step of the claim.	Claim 3 is amended to include new element "a) measuring the transmission oil temperature with the oil temperature sensor."
B	What is a "vehicle voltage?"	Element c) is amended to recite "detecting a vehicle voltage inputted to the oil temperature sensor." This amendment is supported by claim 1 and paragraph [0029] of the specification, and clarifies that the vehicle voltage means the voltage inputted to the oil temperature sensor.
C	How is the transmission oil temperature determined, and what is "a maximum transmission oil temperature?"	Element a) is added that explains how the transmission oil temperature is determined. The maximal transmission oil temperature of element d) is a maximal temperature to detect the fault of the oil temperature sensor (e.g., 50°C). When the oil temperature is higher than the maximal transmission oil temperature, detecting the fault of the oil temperature sensor is impossible. Therefore the process of detecting the fault should be ended.
D	"Step" should be replaced with "step."	Element g1) is amended to recite "step."
E	What is "a value of subtracting" and how was it determined?	Element h) is amended to recite "a value obtained by subtracting," which clarifies that the value = transmission oil temperature - initial oil temperature. Element d2) is also amended to recite "receiving the present oil temperature as the initial oil temperature for detecting the stuck fault . . . ." This amendment is supported by Figures 4-5 and original claim 2, element d).

Claim 5

	Claim Objections	**Amendments / Remarks**
A	What is "a value of subtracting" and how was it determined?	Element j) recites "receiving present oil temperature as an initial oil temperature for detecting the fault of the oil temperature sensor." Element l) is amended to recite "a value obtained by." This clarifies that the value = maximal measured oil temperature – initial oil temperature. Element l1 further describes the "maximal measured oil temperature."
B	What is meant by the term "for de-?"	Element l1) is amended to recite "for determining."
C	How is the difference between the maximal measured oil temperature and the initial oil temperature determined?	The maximal measured oil temperature is described in element l1) and the initial oil temperature is described in element j).

		The difference can be determined by subtraction.
B	What is "a vehicle voltage?" What is "the critical voltage" and how was it determined?	A "vehicle voltage" is described in step a) of claim 1. The "critical voltage" is a minimum voltage for operating the apparatus (e.g., 10V). If the vehicle voltage is smaller than the critical voltage, the apparatus does not work. Therefore, the method for detecting the fault of the oil temperature sensor should be stopped.
C	How were the "value" and the "critical oil temperature rate" determined?	The meaning of the "value" is described above. The "critical oil temperature rate" means a minimal difference between the maximal oil temperature and the initial oil temperature for normal operation.
D	What is "a jumper monitoring" timer, and how was it determined?	The "a jumper monitoring timer" is an apparatus measuring how much time has elapsed before a jump fault. The time measured by the jumper monitoring timer is compared with the jump fault determining time. Element k) is amended to recite "comparing a time on a jump monitoring timer . . . ."
E	What is the "fault confirming timer," and how can it be increased? Perhaps Applicant should replace it with "increasing a time on a jumper fault confirming timer" throughout the claims.	Element m) is amended to recite "increasing a time on a jumper fault confirming timer." A "timer" measures time lapse. "Increasing" means recording or measuring the time lapse without stopping.
F	The step of "comparing the jumper fault confirming timer . . ." is confusing because it is not clear what Applicant means by "comparing the jumper fault confirming timer with a jumper fault confirming time." Also, remember the second occurrence of the claimed term should go with the article "the" for a proper antecedent basis.	Element o) is amended to recite "comparing the time on the jumper fault confirming timer with a jumper fault confirming time." The "jumper fault confirming timer" is a timer measuring how much time has elapsed until the jumper fault. The "jumper fault confirming time" is a standard time to confirm the jumper fault. If the time on the jumper fault confirming timer is larger than the "jumper fault confirming time," the jumper fault can be determined.
G	What is "a jumper fault" and how was it detected?	According to the specification and Figures 4 and 5, there is a method for determining whether there is a fault of an oil temperature sensor by detecting abnormal excessive increase or decrease of an oil temperature. A result and purpose of the method shown in Figures 4 and 5 is to detect the jumper

		fault. Therefore, the jumper fault means an abnormal excessive increase or decrease of an oil temperature.
H	What is "increasing a jumper fault confirming timer," and how can it be increased? Perhaps Applicant should replace it with "increasing a time on a jumper fault confirming timer" throughout the claims.	Element m) is amended to recite "increasing time on a jumper fault confirming timer.

Claim 6

	Claim Objections	**Amendments / Remarks**
A	What is a "vehicle voltage" and "a critical vehicle voltage" and how has it been obtained?	"Vehicle voltage" is introduced in claim 1, and so element i) is amended to recite "the vehicle voltage." The critical voltage is a minimum voltage for operating the apparatus (e.g., 10V). If the vehicle voltage is smaller than the critical voltage, the apparatus does not work. Therefore, the method for detecting the fault of the oil temperature sensor should be stopped.
B	How is "the transmission oil temperature" obtained?	Element g) is added that recites "measuring the transmission oil temperature with the oil temperature sensor."
C	How is "the transmission oil temperature" obtained?	
D	How is "determining whether a clutch is under control" done?	Element l) is amended to recite "comparing RPM."
E	How is "a critical time measuring timer" increased? What is it?	A critical time measuring timer is an apparatus to measure time lapse until the transmission oil temperature is larger than the critical oil temperature rate of change for detecting stuck state fault. Therefore increasing a critical time measuring and recording timer means measuring the time lapse without stopping.
F	The language is configuring because it is not clear what applicant means. What is "the stuck fault?"	The word "stuck" means unmovable situation. Therefore, the "stuck fault" means the fault cause by the stuck oil.
	How is it determined that the clutch is "under control?"	Element l) is amended to delete "determining whether a clutch is under control or not."
	What is "a critical time measuring timer" and "increasing a critical time measuring timer?"	Answered above in response to objection E.
	How have "a value" and "a critical oil temperature rate" been determined?	The meaning of "a value" is described above in response to objection A.

		"A critical oil temperature rate" means a minimal difference between the maximal oil temperature and the initial oil temperature for normal operation.
	How is "the critical time measuring timer" compared with "the critical time for determining the fault?"	Answered above in response to objection E.
	What is "the stuck state?"	The "stuck state" means when oil is stuck inside of the oil temperature sensor and causes the sensor to be inoperable.

Claim 7

	Claim Objections	**Amendments / Remarks**
A	"A vehicle voltage" and "a critical voltage" lack antecedent basis.	Claim 5 depends from claim 1. Claim 1 recites "a vehicle voltage" and "a critical voltage." Element r) is amended to recite "the vehicle voltage" and "the critical voltage."
B	How is the "difference" determined?	Element l) is amended to "a difference" and refers to engine coolant temperature minus the intake-air temperature. In element l2), the difference is also the engine coolant temperature minus the intake-air temperature. Element m) is amended to "a difference" and refers to the oil temperature minus the coolant temperature. In element m2, the first occurrence of "the difference" refers to the oil temperature minus the coolant temperature. In element m2, the second occurrence of "the difference" refers to the engine coolant temperature minus the intake-air temperature.

Claims 7, 8

	Claim Objections	**Amendments / Remarks**
-	Claims 7 and 8: Perhaps Applicant should insert a step of "measuring the transmission temperature with the oil temperature sensor" as the very first step of the claim.	Claim 8 is amended to include: "g) measuring the transmission temperature with the oil temperature sensor." Claim 7 does not include the phrase "the transmission temperature," and therefore the element has not been added to claim 7.

1) Claim 9

	Claim Objections	Amendments / Remarks
A	"A vehicle voltage" and "a critical voltage" lack antecedent basis.	Claim 9 depends from claim 5, which depends from claim 1. Claim 1 recites "a vehicle voltage" and "a critical voltage." Element r) is amended to recite "the vehicle voltage" and "the critical voltage."
B	It is not clear how "the time indicating how long . . ." and "a critical engine-stopped time" have been determined.	The "time indicating how long . . ." is a time lapse until stopping the engine. The "critical engine-stopped time" is a standard, which is compared with the time lapse until stopping the engine. The fault of the oil temperature sensor is determined when the time lapse is larger than the critical engine-stopped time.
C	How is the "difference" determined?	Element v) is amended to "a difference" and refers to engine coolant temperature minus the intake-air temperature. In element v2), the difference is also the engine coolant temperature minus the intake-air temperature. Element w) is amended to "a difference" and refers to the oil temperature minus the coolant temperature. In element w2, the first occurrence of "the difference" refers to the oil temperature minus the coolant temperature. In element w2, the second occurrence of "the difference" refers to the engine coolant temperature minus the intake-air temperature.

Claim 10

	Claim Objections	Amendments / Remarks
A	"A vehicle voltage" and "a critical voltage" lack antecedent basis.	Claim 10 depends from claim 8, which depends from claim 1. Claim 1 recites "a vehicle voltage" and "a critical voltage." Element s) is amended to recite "the vehicle voltage" and "the critical voltage."
B	It is not clear how "the time indicating how long . . ." and "a critical engine-stopped time" have been determined.	The "time indicating how long . . ." is a time lapse until stopping the engine. The "critical engine-stopped time" is a standard, which is compared with the time lapse until stopping

		the engine. The fault of the oil temperature sensor is determined when the time lapse is larger than a critical engine-stopped time.
C	How is the "difference" determined?	Element w) is amended to "a difference" and refers to engine coolant temperature minus the intake-air temperature. In element w2), the difference is also the engine coolant temperature minus the intake-air temperature. Element x) is amended to "a difference" and refers to the oil temperature minus the coolant temperature. In element x2, the first occurrence of "the difference" refers to the oil temperature minus the coolant temperature. In element x2, the second occurrence of "the difference" refers to the engine coolant temperature minus the intake-air temperature.

Claim 6

	Claim Objections	**Amendments / Remarks**
A	The "detected signal" lacks antecedent basis.	"The detected signal" is amended to "a detected signal.
B	"A vehicle voltage" and "a critical voltage" lack antecedent basis.	Claim 6 depends from claim 1, which recites "a vehicle voltage" and "a critical voltage." Element i) is amended to recite "the vehicle voltage" and "the critical voltage."

Claim Rejections—35 U.S.C. § 112

Claims 3 and 5-10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The rejections are addressed below. Reconsideration and withdrawal of the rejections are respectfully requested.

	Claim Rejection	**Amendments / Remarks**
	Claims 3 and 5-10 are rejected as being indefinite. The numeration of the steps should be different from in claim 1.	Claim 3 does not depend from claim 1. Therefore, Applicants respectfully traverse the rejection. The numeration is proper as is. Claims 5-8 are amended to begin with "g)" because the claims depend from claim 1, and claim 1 concludes with "f)."

		Claim 9 is amended to begin with "p)" because claim 9 depends from claim 5, which concludes with "o)." Claim 10 is amended to begin with "q)" because claim 10 depends from claim 8, which concludes with "p)."

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 1, 3, and 5-10 contain allowable subject matter, and would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in this Office Action. Each of the objections and rejections have been addressed herein. Accordingly, Applicants respectfully request allowance of claims 1, 3, and 5-10.

Conclusion

In view of the above amendments and remarks, Applicants respectfully request a Notice of Allowance. There may be additional reasons that the pending subject matter is patentably distinct from the cited references in addition to those discussed herein. Applicants reserve the right to raise any such arguments in the future. If the Examiner believes a telephone conference would advance the prosecution of the application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Dated: May 16, 2011

/Benjamin A. Tramm/
Benjamin A. Tramm
Reg. No. 62,303
BAT:ae